

# SPEED & SPIN BY DAVE ALCIATORE

**IF YOU** want to understand the intricacies of bank shots, speed and spin are two necessary starting points.

## SPEED

The major consideration with regard to speed is the rebound angle of the object ball (OB). Take a look at the bank shot in **Diagram 2**. If you squarely hit the 1 ball with medium speed toward the second diamond, you should make this shot. But what happens when you add or subtract speed?

In general, more speed shortens the rebound angle. With a firm stroke, you will bank the 1 ball short of the pocket (where it will hit the long rail). Conversely, with a soft stroke, the rebound angle will be much wider, so the 1 ball will bank long and hit the short rail.

If you watch professionals play bank pool, you will notice that they tend to use a lot of speed. It's not just because drilling a bank at warp speed looks cool — it does. Rather, shooting a bank at a high speed reduces certain variables.

When an OB is struck by the cue ball (CB), it will begin rolling forward due to the friction between the OB and the cloth. This roll can curve the OB's path after hitting the rail. A firmly struck OB, however, will pick up less roll, which will minimize its influence on the OB after it contacts the rail.

It is also important to know that increasing speed reduces the effective size of the pocket, because the faster a ball is traveling, the more likely it is to rattle in the pocket's jaws. But experienced bankers prefer the

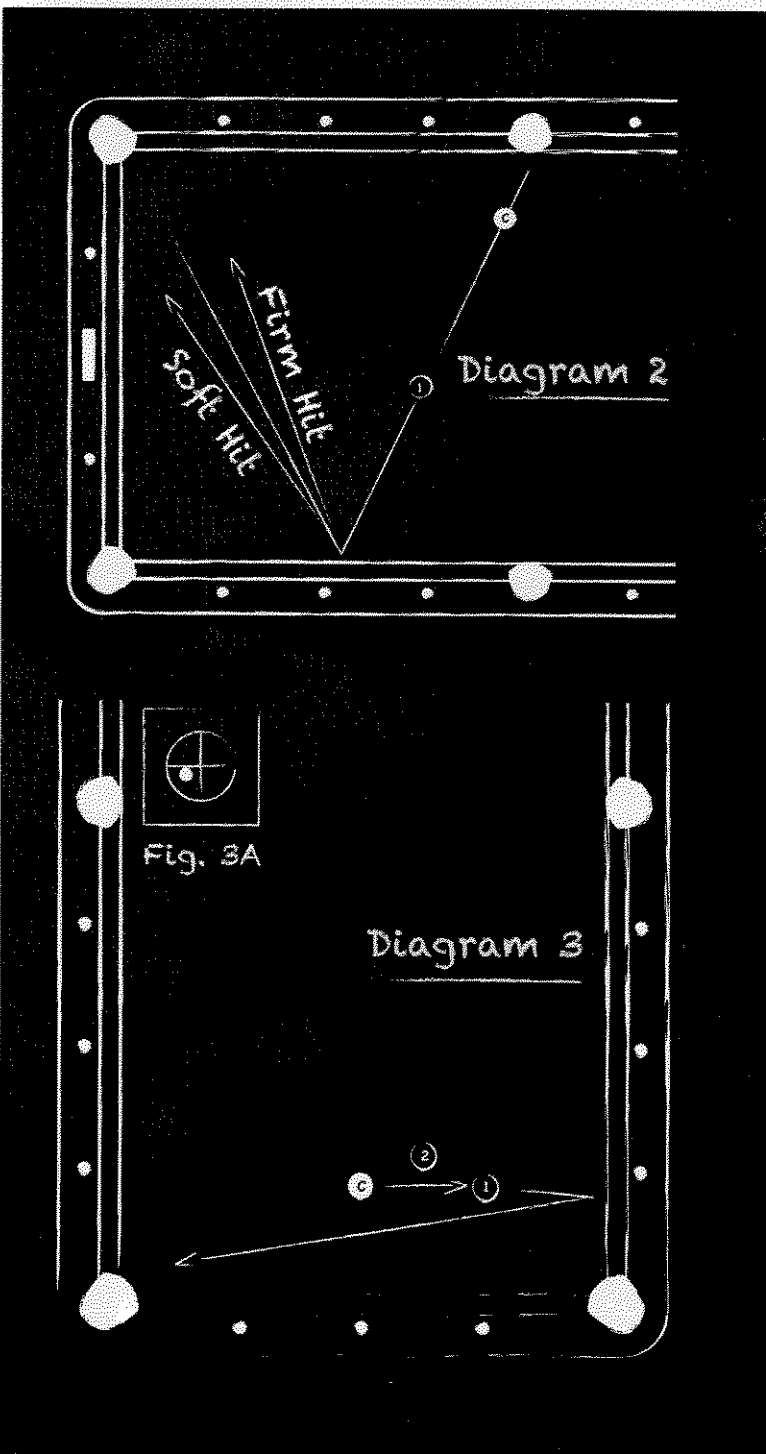
consistency of speedy banks to this downside.

It's also important to know that playing conditions, such as the cleanliness of the balls or the wear on the cloth, can have a large impact on how the balls react to one another and the table.

## SPIN

"Throw" is any change in the OB's direction due to sideways forces between the CB and OB during impact. As an example, right English on the CB creates a sliding friction force that pushes the OB to the left. This force is what creates a "throw angle." At the same time, the CB will also impart spin on the OB, referred to as "spin transfer." Because the throwing force of the CB is pushing on the edge of the OB, it causes the OB to rotate in the opposite direction. So after contact with a CB with right English, the OB will be spinning to the left.

**Diagram 3** shows an example shot where throw and spin transfer are critical. Without these effects, the shot wouldn't be possible as shown. The goal here is to bank the 1 ball cross-corner. The problem is the 2. It prevents you from hitting the left side of the 1 at a normal cut angle to make the shot. However, by applying left English with a slow to medium speed, the shot can be made. The left English on the cue ball will throw the 1 ball to the right (from the shooter's perspective). The throwing force imparts right English on the 1 ball, which will lengthen its rebound angle



enough to send it into the corner pocket.

To maximize throw, use a soft stroke and hit the cue ball on its horizontal axis.

Conditions will change, so if you want try the shot yourself, experiment with speed and/or the amount of English.